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USSR Report

TRANSPORTATION

No. 93

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OCEAN AND RIVER

NEW SUPERTRAWLER HEADS FOR ATLANTIC ON MAIDEN VOYAGE

Vilnius CZERWONY SZTANDAR in Polish 7 Jul 82 p 3

[Article by W. Trawuszkin, CZERWONY SZTANDAR correspondent]

[Text] A new supertrawler, the Telviai, embarked on its first voyage from the Klaipeda Marine Fishing Port. The new ship was built as a project of Soviet and Polish engineers at the Stralsund (GDR) Shipyards. It was awarded the distinguished Red Banner Order of Labor of the Klaipeda Fishing Fleet Base.

The new ship has two powerful 1,400-horsepower engines. In order to draw out the nets, the ship is equipped with two jacks, which permits fishing at great depths. The equipment for processing, freezing or canning fish is arranged in a new manner in the spacious factory halls. Modern Japanese navigational equipment is installed in the central control panel of the supertrawler. Using earth satellites with its help, the coordinates of the ship's position can be determined very accurately. In addition, Japanese devices for locating fish are operated here, too.

The ship is being commanded on its first voyage to the Atlantic by Captain Aleksiy Titov, who was formerly a captain's senior aid on similar trawlers.

The crew of the ship has maintained friendly contact with the workers' collective in Telviai. Several delegations from the city were on board the ship while it was at Klaipeda. A treaty of friendship and cooperation was signed with them. Bibliophiles in Telviai provided the crew with a library of Lithuanian- and Russian-language books.

CSO: 2600/834

RAILROAD

BAM CONSTRUCTION IN SWAMPY AREAS DISCUSSED

Moscow TRANSPORTNOYE STROITEL'STVO in Russian No 2, Feb 82 pp 6-7

[Article by Engineer G. P. Minaylov, Candidate of Technical Sciences V. V. Guletskiy (Tynda Permafrost Station): "Ways to Increase the Stability of the Fills Constructed in the Swampy Sectors of the BAM"]

[Text] Maintenance of the stability of the railroad fills in the permafrost regions is one of the most complex problems of engineering permafrost management. The firmness and distortion characteristics of the permafrost soils are to a considerable extent determined by their temperature and hence in calculating the stability of the fills it is necessary to give the fullest consideration to the temperature factors. Meanwhile the actual data on the natural laws of the thermal and mechanical interactions of the permafrost layers and the theoretical knowledge existing in this field are extremely meagre and contradictory.

There are still considerable complexities arising because of the fact that the current normative documents do not shed sufficient light on some of the essential subjects pertaining to construction of the soil bed for the railroads in the permafrost regions. Because of this, when preparing the working drawings for the BAM soil bed, various planning institutes used very rough thermotechnical calculations to substantiate their decisions and for the same fill conditions they applied design decisions which not only differ considerably in cost and material input but are also characterized by varying stability. Thus, for example, on the BAM-Tynda-Berkakit and Tynda-Urgal-Komsomol'sk railroads the minimum height of the fills on the swamps composed of soils of category III and IV erosion was 1.5-2.0 meters while they are 3.0-3.8 meters on the Tynda-Chara line. And whereas on the BAM-Tynda and Urgal-Komsomol'sk lines they have recommended draining off the berms at the fills only in the sectors of thermal cave development, on the lines from Tynda to Urgal, Berkakit and Chara, despite the VSN 61-61 requirements, they have now become an inherent element of the structure of the fills built up on the soils of category III and IV erosion.

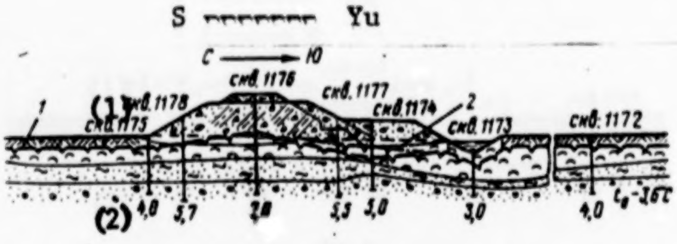

Рис. 1

Diagram 1

Key:

1. Special Design Office (SKV)
2. Temperature

The large-scale use of berms has led to a considerable rise in the cost of construction of a soil bed: the cost of one kilometer of fills with berms is 25-30,000 rubles greater than the cost of one kilometer of fills of the usual structure. These costs could have been justified if the berms actually increased the stability of the fills built up under the difficult permafrost soil conditions of the BAM. But, unfortunately, this is practically never the case.

A more detailed investigation in this regard will be aided by an examination of the soil temperature regimes evolved after the construction of the railroad fills. As investigations have shown (Bibliography 1), the flow of this process depends to a considerable degree on the average yearly temperature of the soil surface at various elements of the soil bed. The temperature regime of the bedding soils are also affected to a marked extent by the height and structure of the fills (the steepness of the slopes, the width of the main platform, the presence of berms) i.e., the factors which determine the size of the platforms to which the appropriate heat load is applied (the upper border temperature) (Bibliography Item 2).

Natural observations and theoretical calculations show that other conditions being equal, the greater the fill's impact on the original thermal status of the foundation soils and the greater the area it occupies, the more substantial the difference between the steady average temperature readings of the soils at the surface of all the elements of the fill and the temperature of the permafrost rock under natural conditions. Thus, when the average temperatures of the soils in all the elements of the fill are below the temperature of the permafrost layer in the zone of zero amplitudes, the fill has a cooling effect on the original heat status of the foundation soils. The operation of similar natural laws is seen in the regions of the Extreme North.

When the opposite relationship between the average yearly temperatures obtains, we see a warming effect of the fill on the foundation soils. Stemming from this is the conclusion that the berms help the cooling of the bedding soils of the fill only when the average yearly soil temperature determined at the surface of the soils is below the temperatures of the permafrost rock under natural conditions.

Within the BAM route, because of the specific characteristics of the radiation regime of the surfaces and the snow accumulation regime in various elements of the fill, there evolve on the berms favorable average yearly temperatures of the soil surface or unfavorable temperatures close to 0 degrees Celsius. Thus, with the emergence of berms at the fill (height 1-1.5 meters and width 3-5 meters), the bed soils acquire a favorable influx of heat, which leads to a lowering of the natural depth of the stratification of the frost level at the foundations of the berms and a rise in the average yearly temperature of the permafrost rock (in the central part of the BAM) or leads to a considerable expansion of the thawing basin under the fill as a whole (in the western and eastern sectors). These processes are usually accompanied by the development of additional settling of the fills, which leads to a reduction of their overall stability. These facts can be illustrated by examples.

Drawing 1 showed the engineering and geological structure of the fill poured off on the hilly swamp at the southern part of the BAM-Tynda line. In the preparation of the plan for the reconstruction of the fill, along with the one-sided expansion we provided an installation consisting of a berm and a drain channel from the highland side of the fill. The main volume of the work for the reconstruction of the fill was fulfilled in August 1973 and the pouring off of the berm as per the agreement with the customer in September 1977, when the line was made ready for turning over for regular operation. Two years after the pouring off of the berm the configuration of the upper border of the ice area at the foundation of the fill had a largely convex-concave form (line 1). In the profiles at the slope of the northern exposition and the axis of the fill the horizon of the frozen ground is lifted over the level of its natural occurrence while under the slope of the southern exposition and berm the surface of the frozen ground occurs 0.6 and 0.9 meters (SKV 1177 and 1174 respectively) lower than under natural conditions (SKV 1172). Before the pouring off of the berm the settled depth of the seasonal thawing of the soils (line 2) in the profile at the center of the southern slope was 0.2 meters less and at its foot 0.5 meters less than the quantities observed in 1981.

Under the other elements of the fill the depth of the seasonal thawing of the foundation soils after the pouring off of the berm remained unchanged. Thus, the pouring off of the berm in the instance in question, instead of the expected increase of the stability of the soil bed, was the cause of an increase in the depth of the seasonal thawing of the soils under the slope adjacent to the berm. This led to additional one-sided settling of the fill and the formation of a lengthwise crevice in the upper part of the slope.

When analyzing the results of many years of observation of the temperature regimes of the soils at the foundation and body of the fill in question, we cannot fail to note particularly the fact of the warming effect of the bedding soils. The most intense heating is observed in the areas at the southern slope of the fill (SKV 1177) and the berm (SKV 1174) where the steady average temperature of permafrost at a depth of 4 m from natural surface level is -1.3; -1.2 degrees Celsius, respectively, which is 2.0-2.5 degrees Celsius higher than at the same depth in natural conditions (SKV 1172). It should be noted that before the filling of the berm the steady average yearly temperature of the soils at this depth was lower than the temperature after it is poured off: in hole 1177--0.06 degrees Celsius lower and in hole 1174--1.4 degrees Celsius lower. This is convincing proof of the correctness of the aforementioned idea of the warming effect of the berm on the temperature regime of the soils at the foundation of the low fills built in the swampy sectors of the central part of the BAM.

In the eastern sector of the BAM, because of the nature of the climate, all the elements of the soil bed ,with the exception of a narrow strip bounded by the dimensions of the upper part of the ballast prism at the surface of the soil layer, are subject to a favorable average yearly temperature of the surface of the soil layer. In these circumstances the construction of the berms at the fills necessitates not only an increase in the average yearly temperature of the bedding permafrost rock but also considerable thawing of it.

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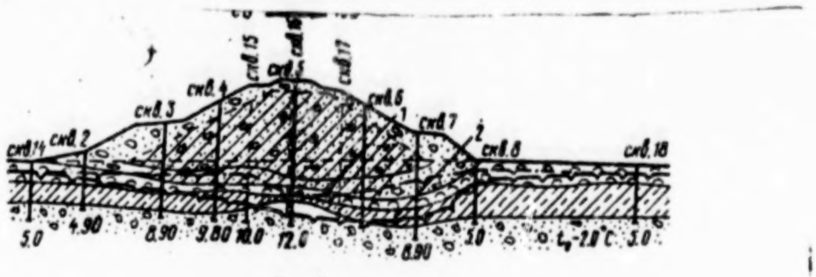

Diagram 2

Thus, for example, prior to the reconstruction of the fill, the lateral profile of which is shown in Diagram 2 by dashes, the evolved depth of the stratification of the upperboundary of the permafrost rock (line 1) is characterized by the following numerical values in its various sections: 1.20 (SKV 3); 6.30 (SKV 15); 8.5 (SKV 16); 7.90 (SKV 17) and 1.50 (SKV 7). In 2 years the fill was rebuilt: the main platform was widened and the two-sided berms were poured off. As a result of this, the depth of the stratification of the upper boundary of the frozen soil (line 2) was considerably increased and in these sections amounted to 2.0; 8.60; 10.0; 10.0 and 4.40 meters respectively. It is self-evident that the increase in the depth of the thawing of the ice-filled soils at the foundation of the fill in question is accompanied by the development of additional settling; this could have been avoided by giving up the installation of the berms.

The operational experience of the BAM sectors, which are characterized by complex frozen soil conditions, has also shown that the fills without berms are less subject to deformations than the fills which have berms.

All this substantiates the inadmissibility of the general use of berms when constructing the soil bed for the BAM. Eliminating them will not only help to increase the stability of the fills but will also lead to a reduction of the consumption of materials and in the cost of the soil bed.

In instances where the installation of the berms is dependent on the current norms, pouring them off requires the use of rocky ground which does not contain gravel and fine soil. This is confirmed by the data of the nature-derived observations of the Tynda frost station with respect to the fills with berms on rocky ground. It has been determined that with a height of 1.0-1.5 meters and a width of 3.0-5.0 meters the upper border of the permafrost rock usually remains at the level of natural stratification and the initial temperature of the frozen area drops; this has a favorable effect on the stability of the soil bed as a whole.

BIBLIOGRAPHY

1. Porkhayev, G. V. "The Thermal Interactions Between the Buildings and Installations and the Permafrost Soils." Moscow, NAUKA, 1970 pp 29-55.

2. Khrustalev , L. N. "The Temperature Regime of the Permafrost Soils in the Built-Up Territory." Moscow, NAUKA, 1971.

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7962
1829/177

BAM VISITED BY ACADEMICIANS

Moscow MOSCOW NEWS in English 6-13 Jun 82 p 8

[Article by Yevgeny Bugayenko]

[Text] The Baikal-Amur Railway (Russ. abb. BAM--Ed.) is being built under extremely harsh conditions (permafrost, frequent earthquakes, huge river floods and sharp drops in temperature). This creates many serious problems.

The USSR Academy of Sciences has set up a Learned Council to deal with BAM's problems. This Council, led by Academician Abel Aganbegyan, includes scientists, builders, representatives from ministries, departments, public organizations and local authorities.

The Council is preparing a comprehensive programme (up to the year 2000) for the USSR State Planning Committee to reclaim areas (amounting to 1,500,000 sq km) adjacent to BAM.

The Council held its 14th session at BAM's eastern section in order to fully analyze the prospects and priority tasks for the region's economic reclamation.

The scientists visited the area to consult with experts and see, first hand, the work which has been already done.

BAM's eastern section (821 km of the main track) was built ahead of schedule, and the main line should be commissioned by November 7. The railway line will be open to heavy trains from Urgal to Komsomolsk-on-Amur and even further--to Vanino (a Pacific port).

The academicians are travelling along the 1,500-km-long railway ring which, thanks to BAM, originated in the Far East. It connects the deserted--although rich in natural resources--northern areas (which are crossed by the BAM's eastern section) with the southern regions of the Far East. The latter area has developed industry and agriculture, along with cultural centres.

This Far Eastern ring is already operating for all practical purposes. Freight trains carrying timber, coal, machinery and building materials can be seen on every station and siding. But the railwaymen are still not satisfied. They want to handle far more trains.

CSO: 1812/142

NATURAL RESOURCE DEVELOPMENT IN ZONE OF BAYKAL-AMUR RAILWAY LINE

Moscow SOVETSKAYA ROSSIYA in Russian 13 Jun 82 p 2

[Article by Candidate of Technical Sciences E. Golland, Candidate of Economic Sciences A. Dubnov and Candidate of Economic Sciences A. Kin, scientific secretary of the Scientific Council for Problems of the Baykal-Amur Railway Line of the USSR Academy of Sciences (Novosibirsk): "The Baykal-Amur Railway Line Heads for the 21th Century"]

> [Text] Nearly 8 years have passed since the first construction workers arrived at the Baykal-Amur Railway Line. Today more than 2,000 km of the main track have been laid. Although twofold more assets still have to be assimilated, today the prerequisites of the extensive economic development of the natural resources in the zone of the Baykal-Amur Railway Line have already been created. Such a task was set by the 26th CPSU Congress. USSR Gosplan has been commissioned to elaborate specific measures for the 11th Five-Year Plan. How is this important program being carried out?

The fact that today the country is already receiving Neryungri coal is perhaps the main achievement of the past in the practical implementation of the outlined plans. This very rich deposit is beginning to benefit the national economy. In August of last year the further fate of the Southern Yakutsk Complex was determined. Now it will be developed in accordance with a long-range plan.

Matters in the other regions adjacent to the railway line are more complicated. For the present only the USSR Ministry of Geology is working here on a broad front. Of course, the geologists must expedite the prospecting of the important Kholodnenskiy deposit of polymetals and complete the obviously dragged out preparation of the reserves of the Nepskiy basin of potassium salts, which is of world significance. But all the same it is already possible today to imagine quite clearly what natural resources exist in the zone of the railway line.

Unfortunately, it is impossible to say this about the design studies which should precede the building of enterprises. They are being conducted with an appreciable lag behind the planned rate of development of the region. When the deadlines draw near, at times superficial decisions are made in haste. This has already had the result that the estimate cost of the Neryungri Coal Complex was underestimated. It would not be surprising if we were also faced with such miscalculations at the Udokan copper ore deposit.

The sectors are now allocating purely symbolic assets: less than half a percent of all the capital investments, for the design and predesign studies. But the standards call for 2 percent, and in new regions, as practice shows, this is also insufficient.

But it is not only a matter of this. Applied science is not keeping pace with the development of the equipment and technology of the working and concentration of minerals, which is seriously complicating the performance of design work. This problem is especially important as technology not even of tomorrow, but the day after tomorrow is needed for the regions of the Baykal-Amur Railway Line--the enterprises will operate in the 21th century on the basis of the decisions made today. But many sectorial institutes so far do not have clear ideas on the basic aspects of the regional technical and technological policy of the development of the zone. As a result obsolete ideas were used when designing some already operating industrial projects. For example, due to an imperfect processing method about half of the valuable components of the ores of the Solnechnyy metal-bearing region are going to the dumps.

Only the heroes of Jules Verne got to the moon by means of a gigantic cannon. In life it has been necessary to develop fundamentally different transportation technology--rocket technology, which is a match for the imposing goal. Precisely the goal dictated the choice of means. In the zone of the Baykal-Amur Railway Line there are unique mineral deposits and specific conditions. But, if we judge from the existing designs, we are getting ready to go there with traditional processing methods. The studies of the State Institute for the Planning of Enterprises of Nonferrous Metallurgy, for example, call for traditional bucket excavators, only of a greater unit capacity, although the Institute of Mining Affairs of the Siberian Department of the USSR Academy of Sciences several years ago proposed fundamentally new methods of the stripping and working of deposits. Of course, such an orientation does not bode well, and, while it is still not too late, it is necessary in principle to change the approach to design developments, they should meet the requirements of the regional technical policy.

First of all the designs should take into account the specific nature of the natural and climatic conditions of the zone. Here the protection of the air basin is very difficult. In the intermontane basins, such as, for example, the Charskiy basin, still air, which prevents smoke from dissipating, dominates. Under such conditions the pollution of the lower layers of the atmosphere from a large individual source can exceed the maximum permissible concentration by tens of kilometers.

The rivers here originate, as a rule, in the high mountains. Therefore their water is cold, while the lengthy freeze-up and freezing limit the saturation with oxygen. All this complicates the self-purification of rivers. Moreover, the ground waters are directly connected with the surface waters, and this contributes to the contamination of the soil and water on large territories.

That is why the processing methods in the zone of the Baykal-Amur Railway Line should be superreliable from the point of view of environmental protection. Unfortunately, the analysis of the developments, with which we have familiarized ourselves, show that sectorial science and designers for the present are inadequately taking into account the recommendations of modern ecology. Take, for example, Udokan. For more than 30 years this deposit in the region of the Charskiy valley has attracted the attention of scientists and designers. However, the plans of its development and the concentration of ores, which have been proposed by institutes of the Ministry of Nonferrous Metallurgy, do not completely meet the requirements of ecology and the complete use of raw materials. For the present it is not know whether it is possible at Udokan, and at other deposits of the zone, to use such an advanced processing method as the microbiological processing method.

The specific nature of the territories adjacent to the Baykal-Amur Railway Line is also dictating its requirements to construction. Of course, the final designs of enterprises depend on the choice of processing methods. However, it is possible and necessary to determine the main principles of their construction beforehand. As practical experience shows, here it is extremely advantageous to use light-weight and prefabricated large-block structural components. The plant technology of their production reduces to one-third to one-half the capital investments. The experience of Noril'sk and the northern regions of Tyumenskaya Oblast has shown that the weight of buildings in this case is reduced to one-twelfth to one-tenth, the amount of shipments--to one-fifteenth to one-eighth, the construction period--to one-fourth to one-third, the labor intensiveness--to one-fifth to one-fourth. As a result the cost of a square meter of production area becomes one-half to two-third as expensive. The rate of construction by high speed flow line methods is also impressive.

At the all-union conferences on the problems of the construction of the railway line and the economic development of its zone, which we have had occasion to attend, everyone admits that the investments in the social infrastructure at the Baykal-Amur Railway line must be increased from 15 percent to 30-40 percent. Only in this way is it possible to attract people to these regions and to attach them there. On the other hand, in the next few years it is quite difficult to redistribute assets so as to increase sharply the investments for these needs. The use of advanced construction technologies is increasing our resources and is making it possible to build rapidly, economically and with a high quality.

All these innovations in themselves as if do not encounter objections of either scientists or experienced workers. However, when it comes down to business, strange metamorphoses begin. The Scientific Research Institute of Economics of Construction of USSR Gosstroy and the Central Scientific Research Institute of Economics attached to RSFSR Gosplan, for example, are speaking about the use of light-weight structural components without an indication of specific addresses and the specific evaluations. As a result in the design developments there is not a word about the introduction of light-weight structural components and unitized modular facilities and about the timely creation of bases of the construction industry for these purposes. Given such an attitude toward advanced processing methods, it is hardly possible to expect a rapid increase of the labor productivity of construction workers.

We would also like to draw attention to the problems of management in the broad sense of the word. For the present there are two drafts of the program of the long-term development of the zone of the Baykal-Amur Railway Line. One was drawn up under the supervision of the Scientific Council for Problems of the Baykal-Amur Railway Line of the USSR Academy of Sciences, the other was drawn up by the Scientific Research Institute of Economics attached to RSFSR Gosplan. Only the tasks of the initial stages of development: the construction of the railway line and the territorial organization of the economy in the zone of the Baykal-Amur Railway Line, have been formulated in detail in them. It is more or less clear what is to be done during the current five-year plan. But the farther you go, the more abstract the tasks are. Meanwhile, it is difficult to implement programs of such a level as the development of the territories of the Baykal-Amur Railway Line without long-range forecasting. Moreover, different goals should also correspond to different periods. World experience shows: the technologies of production and the use of resources and products, as well as the directions of the main and basic research should be evaluated and chosen in advance, at least 20 years in advance. Approximately such an approach has now been outlined in the comprehensive program of scientific and technical progress and its social consequences. So far there has been no time for specific programs of the class of the program about which we are speaking.

In our opinion, the causes of the appearance of "bottlenecks" in the technological and design support of the economic development of the zone of the Baykal-Amur Railway Line should also be sought precisely here. Not without reason is industry not keeping pace with the development of not only special, but also traditional equipment for the territories along the railway line.

The 7 years of experience of building the railway line show in all obviousness: it is necessary in good time to aim domestic machine building at the development of equipment which conforms to the conditions of northern Siberia and to the goals of the long-term program. An economic analysis made at our institute confirms that it is much more advantageous to give assets not to foreign firms, but to our own machine building.

It must be seen to that the regrettable blunders are not repeated. In particular, a responsible task faces academic and sectorial science: under the new conditions of management to implement the methodology of target planning in the long-term program of the development of the zone of the Baykal-Amur Railway Line. This will help to overcome narrow sectorial interests, which hinder considerably the complete development of natural resources.

At the same time as the careful drafting and approval of the program, in the opinion of the Scientific Council for Problems of the Baykal-Amur Railway Line of the USSR Academy of Sciences, the rights of the Commission for the Baykal-Amur Railway Line of the USSR Council of Ministers should be broadened or a similar commission with organs locally should be set up for the day-to-day management of the development of the zone. There is no doubt that at the end of the five-year plan the railway line will be opened for regular train traffic. But they are not building the railroad for the sake of the railroad. The maximum impact from its use will be obtained in the case of the timely and wise development of the natural resources which are hidden in these regions.

7807
CSO: 1829/261

IMPROVEMENTS IN RAILROAD TRANSPORT DISCUSSED

Coal Transport

Moscow GUDOK in Russian 16 Feb 82 p 2

[Article by GUDOK Correspondent V. Denisenko: "How is Coal Transport to be Expedited?"]

[Text] By the end of the current five year plan the Kemerovo Railroad is supposed to transport 172 million tons of coal a day. This means that it will have to ship additionally about 900 cars a day. It is reasonable to expect an increase in the extraction of fuel: the coal associations Kemerovougol', Yuzhkuzbassugol' and Prokop'vevskugol' will begin to get this coal from new deposits by the open-cut method.

Intensive preparations for this are already in progress. The largest Karakan deposit is supposed to yield 10 million tons of coal a year. The first peg was driven in at the site of the Kolmogorovo pit 2 years ago. And not long ago--19 January--the miners delivered the first tons of coal from there. The capacities are being put into operation in parallel with the construction. The rates of this work are on a high level. This is making it possible in the current year to already extract 210,000 tons. The problem of transporting the fuel is becoming ever more acute.

The fuel is now being transported a distance of 30 kilometers to the Sartakovskiy warehouse by motor vehicles. This is not inexpensive. It should be transported by railroad. However, serious concern is being caused by the situation relating to the development of freight stations on the Kemerovo Railroad because of the construction of new installations or the remodeling of the existing ones.

Five years ago the railroad people suggested transporting the coal from Karakan via station Meret'. But this required reconstruction work: increasing the number of tracks and building a point for the preparation of the cars, for service and technical buildings, and for housing. In addition, there was need to develop the approach tracks and to build a coal assembly station.

In 1979 at the request of the association Kemerovougol' the railroad people identified their priority installations with a view to acceleration of the transport of 2 million tons of fuel. They made provision only for what was most necessary to increase the traffic capacity of Meret'. They specified the time limit for putting the installations into operation--1982. All this was reflected in the record of the technical conference, which was approved by V. Butko, the chief of the Kemerovo Railroad and L. Reznikov, the general director of the association. But at this point they have not as yet begun to carry out the planning. Nor do they believe they will undertake the job in the following year. The approach tracks to Meret' are not even being planned.

The coal mining people unexpectedly chose another variant: they decided to extend the approach tracks as far as the Kolmogorevskiy pit with an exit at station Belovo. But it cannot after all provide for the delivery of additional cars for loading or for the processing of loaded cars. As it is now, empty cars are already being prepared at the receiving and dispatch points on this line but some of the through trains have to be run without stopping for change of locomotive and inspection.

The managers of the roads have repeatedly informed the miners about the impossibility of transporting Karakan coal via Belovo under the current conditions.

It is true there is a tentative variant for the acceptance of the fuel at this station. It requires organizing cleaning of the open cars on the tracks of the Kemerovougol' association and the technical preparation of them at Meret'. But this necessitates the building of two receiving and dispatch tracks and two sidings with railroad car processing installations. And the coal mining people have not accepted this suggestion. They believe, they say, that the coal would be there and the railroad people would be compelled to transport it anyway.

Also disturbing is the situation in respect to the transport of coal from the enormous Yerunakovo deposit. This, in particular, requires the development of the Yerunakovo station. This work was begun more than 7 years ago. An allocation of 4.2 million rubles was made for the construction of the first section. However, only 1.8 million rubles have been put into operation. At the suggestion of the coal mining people themselves there was drawn up a list specifying the work which had to be done at accelerated rates. It would be completed in September and would be able to transport up to 2 million tons of fuel. For it they had to lay two tracks, build a point for the preparation of cars, reconstruct the manholes, and centralize the switches and signals. None of this has been done: neither the coal mining people nor the Kuzbas transport construction trust Kuzbasstransstroy are in any hurry.

The situation is not any better in respect to the installations being restored. For example, the development of station Bochaty was included in the plan for reconstruction of the first section of the pit imeni 50-Letiya Oktyabrya, a plan which calls for bringing the coal extraction to 12 million tons a year. When they reviewed the plan several years ago the railroad people urged the construction of four receiving and dispatch tracks there and a point for the preparation of cars. No attention was paid to these observations. In the 11th Five-Year Plan the association is making no provision for the development of the station. At the same time the reconstruction of the coal region is proceeding at full speed: by 1984 the plan calls for introducing additional capacities for the extraction of fuel. But how is it to be transported?

All this is in no way indicative of a practical approach to the exploitation of the new coal deposits of the Kuzbas. The neglect of the development of transport is usually translated into enormous losses for the national economy. However, some managers live just for today.

Perhaps it makes sense to suspend the renovation of the approach tracks of the Krasnobodskiy Production Territorial Administration (PTU) to station Tyrgan: after all, the loading of coal is declining there. Whereas in 1978 the loading averaged 297 cars a day, last year it was only 222 cars.

The facilities freed in the Krasnobrodskiy PTU can be sent for the remodeling of stations Meret' and Yerunakovo. If Kuzbasstransstroy completes the first section of the remodeling of Meret' next year then it will begin helping station Belovo in the preparation of cars and the station can accept coal from Karakan. In Yerunakovo it is necessary to put an additional million rubles into operation, which requires setting up a priority complex and concentrating the manpower of Kuzbasstransstroy on it. Then they will be able to complete the work in the 1983-1984 period. It is of course necessary, finally, to amend the plan for the development of station Bochaty so that the plan can be accomplished in 2-3 years. This is the opinion held by the specialists of the Kemerovo line. The opinion is dictated by the striving to more rapidly achieve the delivery of Kuzbas coal to the national economy.

Improvement of Rails

Moscow GUDOK in Russian 19 Feb 82 p 2

[Article by A. Sazonov, candidate of economic sciences and O. Skvortsov and V. D'yakonov, candidates of technical sciences: "How Much Service from the Rails?"]

[Text] The intensiveness of the use of rails in our country is increasing from year to year. Whereas in 1975 the rail operation required 210-220 scale ton-kilometers, in 1981 the requirement was now 250-260.

With this there is also a concomitant increase in the length of the sectors with the largest loads. It is expected that by the end of the 11th Five-Year Plan the length of the lines with a traffic density of 80 and more millions of the operative ton-kilometers per kilometer a year will double and reach 20-25 percent of the total length of the network.

A great deal has been done to restructure the track work. The capacity of the rails is being steadily increased. To an ever greater extent thermally hardened rails are being installed on the track. The area of seamless track has been considerably expanded. But despite this, the rail situation is still troublesome. This is primarily due to the fact that the rates of renovating and replacing obsolete and physically outmoded rails are intolerably low. In recent years the fixed capital in this sphere has been replaced at the rate of approximately 5 percent a year, which is far below this indicator for the national economy as a whole.

An explanation for the situation which has evolved is easily found--the work necessary for replacement of the rails is extremely costly in respect to capital. A radical solution of the problems entailed in this would subject the country's economic system to a strain which is obviously undesirable at the present time. And hence it is a matter of especially great importance to provide for the skillful use of all the reserves, including those encompassed by the economic mechanism, particularly in the distribution of the depreciation deductions.

The norms in effect since 1975 have provided for a 5.5 percent depreciation deduction from the fixed capital for the rail establishment. But the lion's share of this--5.3 percent--is earmarked for capital repair and only a negligible proportion--0.2 percent--is used for restoration.

Let us try to analyze what this last figure means. If we assume that 0.2 percent of the fixed capital is sufficient for the yearly replacement of the rails then it is not hard to calculate that the service period for the rails to the time of their replacement is assumed to be no less than 500 years! It seems that such a fantastic assumption does not serve our overall objective--to make every link of the transport organization reliable and efficient.

In actuality the average service periods of the rails, computed for normative traffic tonnage, comes to 10-15 years. The discrepancy between the reality and the incredible figures encompassed in the depreciation norms is responsible for the fact that with us the rail renewal operation is largely the result of capital repair.

This technical and economic strategy is defective per se. The consequence of it, in particular, is that every year sees an increase in the area in which the normative tonnage is exceeded. As of today the length of the tracks which have "served beyond" the established time exceeds 40,000 kilometers and every year this figure is increased by 800 kilometers. And yet the operation of these tracks requires large additional outlays. For example, these lines are characterized by an increase--sometimes as much as 15-fold--in the number of cases of elimination of some defective and seriously defective rails. In these sectors they usually put in effect a limitation on the speed of movement of the trains and there is a reduction in the traffic capacity. Finally, wherever there are rails which have long since served beyond their time limit there is a considerable increase in the resistance to the movement of the trains and consequently an increase in the energy outlays.

Thus, we are getting a decline in the effectiveness of transport as a whole as a result of the policy stemming from the current procedure for the distribution of depreciation deductions in connection with the policy of using rails which should long since have been replaced. We need to change the normative depreciation periods for the service of the rails to reduce them from the mythical 500 years to an approximate realistic 25-30 years. It is accordingly necessary to also change the proportion of the depreciation deductions applied to full restoration of the rails--the proportion should be equal to or even exceed the proportion used for capital repair. This is precisely how it is in many other sectors: in industrial transport, for example, the depreciation deductions come to 3.1 percent, of which 1.5 percent goes for restoration of track. For the crane tracks the total depreciation amounts to 7.9 percent, of which 4.2 percent is applied to restoration.

A rational distribution of the depreciation deductions will provide a stable financial base for maintaining the condition of the line at the required level. The essence of the task is increasing the proportion of amortization capital used for the renovation of rails and in an equivalent amount increasing the appropriations for technical progress in the industry.

At the same time, the proposed measures do not preclude having the amortization periods for service of the rails exceed the amounts which have actually evolved. Consequently, the amortization period of 35-30 years will provide sufficient motivation for the full use of the fixed capital of the rail facility--the point is that today the actual period of operation does not, as we have already pointed out, exceed 15 years.

An important factor is the circumstance that the proposed measures do not change the essential status of things when the part of the balance-sheet cost of the rails up to the time of expiration of their service period is not yet listed in the amortization documents. Since it is not proposed that the total amount of the depreciation deductions be changed, the residual value of the rails is not reduced and thus there is no disruption of the system of repeated use of the rail resources. The rails which have served out their time on the main tracks are installed on the secondary tracks and are shifted to the approach tracks of the industrial enterprises. If we take into account the calculations which in railroad transport make up the depreciation deductions for restoration and do not take into account the residual value, then the assets obtained from the sale of the departing rails can be considered a supplementary source of financing for the development of production, including financing for the work of track renovation.

Finally, the proposed improvement of the structure of the depreciation deductions provides for an increase in productivity and a reduction in the proportion of manual labor. It is a fact that renewal of the rails enables us to employ full mechanization on a more extensive scale and to concentrate the working hands made available on capital repair of the track.

The party and government decisions with respect to the current five-year plan call for a great deal of work for appraisal of the value of the fixed capital to be followed by the preparation of new amortization normatives, including those for the rail operations. In addition, the new wholesale prices introduced at the beginning of this year also provide motivation for accelerating the work of reexamining the structure of the amortization amounts--because of the increase in wholesale prices these amounts have also increased. All this compels us to think through in serious fashion the situation which has evolved in this matter and to take rapid measures to change this situation.

Railroad Capital Construction

Moscow GUDOK in Russian 25 Mar 82 p 2

[Article: "Insuring On-Schedule Introduction of Facilities"]

[Text] The board of the Ministry of Railways reviewed the measures for fulfillment of the capital construction plan and the prescribed 1982 assignments for putting municipal and domestic service installations into operation.

Mention has been made of the fact that in 1981 there were fulfilled the assignments established by the national economic plan for the putting into operation of new lines and second tracks and for the construction of automatic blocking and dispatcher centralization, intercity communication cable lines, and metros. The planned construction of the Baykal-Amur Mainline was carried out. The volume of construction and installation increased by 126.9 million rubles or 6 percent. In addition, 106 million rubles of work based on noncentralized sources of financing was fulfilled. The best results in capital construction were achieved on the Belorussian, Transcaucaus, Central Asian, Southwestern and Donetsk railroads.

As a whole, the construction and installation organizations have fulfilled the plan for contract work and the assignments for increasing labor productivity and profit. They also made provisions for putting into operation schools, children's preschool institutions, hospitals and a number of other installations.

At the same time, because of serious deficiencies in capital construction, in 1981 the amount put into operation was 213.6 million rubles short of the planned amount. There was not achieved the necessary concentration of labor and material resources on the underway projects. This was one of the main reasons for the failure to fulfill the assignments for putting capacities into operation. Especially unsatisfactory is the situation which has developed in the electrification of a number of the lines, the laying and lengthening of station tracks, the installation of radio relay communication lines, and the remodeling of plants for the repair of rolling stock and the production of spare parts.

There has been unsatisfactory fulfillment of the plans for capital construction on the Oktyabr', Southern, Moldavian, Odessa, Southeastern, Sverdlovsk, East Siberian, Transbaykal and Far Eastern railroads, where there has been the greatest arrears in putting facilities into operation and where provision has not been made for the starting of use of the production capacities of the most important sectors of the economy and housing and social service installations.

Also falling short of fulfillment were the prescribed assignments for putting into operation dwelling homes and cultural, personal service and public health installations on the Moscow, Northern, Kuybyshev, South Ural, Alma-Ata and several other railroads.

Not wholly fulfilled were the commitments stemming from the collective contracts for the construction of sanitary and personal service facilities on the West Kazakhstan, Tselinna, Southern, Southeastern, South Ural and several other railroads.

Because of the unsatisfactory organization of the construction production, poor planning and labor discipline, and deficiencies in the material and technical maintenance, 11 of the railroad construction and installation trusts were unable to carry out the program of contract work.

The board established a complex of measures for successful fulfillment in 1982 of the plans for capital construction and for putting into operation production capacities and housing and personal service installations.

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RAILROAD

IMPROVEMENTS REQUIRED IN OPERATION OF RAILROADS

Plant Improvements

Moscow GUDOK in Russian 1 Apr 82 p 2

[Article: "Improving the Work of the Plants"]

[Text] The board of the Ministry of Railways reviewed the results of the plant conference for repair of rolling stock and production of spare parts. It was noted that as a whole in 1981 the plants fulfilled the plan for volume of commodity production and increase of labor productivity. In 1981 production volume increased by 1.4 percent and labor productivity by 1.2 percent. The plan for repair of freight and passenger cars, self-contained refrigerator cars and diesel trains.

At the same time, in 1981 the plants fell short in delivery from repair of 213 diesel locomotive sections, 42 electric locomotives, 11 electric train sections, 13 refrigerator trains and sections, 7 track machines and 1433 diesel locomotive traction electric motors. They failed to fulfill the plan for repair of machine tools and compressors and in their deliveries to the railroads were short 17,300 general-purpose containers, a considerable quantity of spare parts, multiple thread semirigid slings, tie rods, and other items. The 1981 plan for commodity production was not fulfilled by 12 plants and the plan for sale of output by 16 plants. The plants had serious deficiencies in the organization of production and labor and in material and technical maintenance and they suffered substantial production losses because of material wastes and defective output. Large amounts of assets were diverted to above-norm reserves of commodity stocks and to outstanding indebtedness.

The plant main administrations for the repair of rolling stock and the production of spare parts also failed to take the required measures for increasing the coefficient of shift work of shops and equipment and maintenance of rhythmic production. The result was a failure to make full use of considerable reserves for increasing the production of output and improving its quality. A particularly low coefficient of shift work was recorded at the Krasnoyarsk, Astralshan, Orenburg, Minsk, Vologda, Pushkin, Anzhero and Tbilisi plants. A number of plants, and primarily the Orenburg, Tashkent, Ussuriysk and Novosibirsk plants, are not fulfilling the norms for the layover of rolling stock in repair.

As before, the quality of repair of diesel locomotives is low at the Voronezh, Tashkent and Dnepropetrovsk plants, of electric locomotives at the Zaporozh'ye and Novosibirsk plants, of passenger cars at the Tbilisi and Ordzhonikidze plants, and of electric trains at the Krasnoyarsk and a number of other plants.

There are significant deficiencies in the organization of capital construction. In 1981 the construction work plan was 84.5 percent fulfilled for the plants as a whole.

In the January-February 1982 period also there was no appreciable improvement in the work of the plants. There was a lag in the fulfillment of the plan for repair of electric locomotives, electric trains, and freight and passenger cars and for the manufacture of a number of spare parts and products.

The board mapped out a complex of organizational and technical measures for unconditional fulfillment of the production and capital construction plan, for improvement of the organization of material and technical supply, for improvement of the selection and assignment of personnel, for the strengthening of labor and production discipline, and for the creation of the most favorable labor and living conditions for the workers of the plants.

Repair of Rolling Stock

Moscow GUDOK in Russian 1 Apr 82 p 2

[Article by V. Kaz'min, candidate of technical sciences: "Where Metal is Lost"]

[Text] By the end of the five-year plan all the freight cars are supposed to be converted to axles with roller bearings, a step which should have an enormous effect on transport. At the same time, full outfitting of the rolling stock inventory with roller bearings will confront the railroad workers in more acute fashion with the problem of repair of the wheel pairs althought the matter is quite urgent even now. Because of wear and tear in the wheel seats we lose every year more than 10-11,000 axles--which are sent for refusion--this requires approximately 5,000 tons of critically needed axle steel.

We now have several methods of using the axles with reduced dimensions of the rail webs. These methods require reducing the inside diameters of the rings by galvanizing or applying an elasticity gage and by carefully selecting gradation wheels. In addition, it is possible to restore the rail webs themselves. The three first methods have found application in our transport. For electric rolling stock galvanizing of the rings is employed; in the metros they use gradation rings; and in repair of locomotives they employ an elasticity gage on them. However, for the axles of freight cars these methods are not effective enough and galvanizing the rings for passenger cars is simply prohibited.

At present the specialists of the railroad car and plant main administrations feel that the most expedient way is to restore the junction of the bearing ring and the rail web of the axle and to dust the metal. This method of metallization was developed in the VNIIZhT [All-Union Scientific Research Institute of Railroad Transportation] back in the 1972-1974 period. At that time they set up an experimental sector for restoration of the axle rail webs of the railroad car wheel pairs by this method. The institute's research showed that metallization makes it possible to renew the railroad car axle rail webs and to insure the same metal fatigue strength and wear resistance as in new parts. The economic effect will amount to approximately 35 rubles per axle. An experimental batch of wheel pairs with metalized rail webs, after 200,000 kilometers of operation, was sent for regular use on general operational principles.

But despite the advantages of the restoration by this method and despite the fact that industry does not now always provide the repair plants with a sufficient quantity of forgings for the new axles, today, as it was decades ago, thousands of these parts go into scrap metal because of wearing away of 3-4 tenths of a micron or at best are reground into other parts. What is the reason for this?

The specialists of the plant main administration are of the opinion that the introduction of the metallization method is inhibited by the lack of equipment for polishing or sharpening the restored rail webs on the assembled wheel pair. It is the reason, for example, why the Voronezh locomotive repair plant rejected the new technology even though the wear and tear on the rail webs of the axles there led to the scrapping of more than a thousand wheel pairs. At the Oktyabr' EVRZ [Electric Locomotive Repair Plant] more than 1500 of them were in this category.

However, in the opinion of our institute, the chief factor is that the plants simply have no desire to bother with the new technology. And why is this? After all, the enterprises do obtain, although in limited quantity, forgings for the new axles. Apparently the plant administration is not too presistent in resolving this matter even though from time to time documents have come to the institute from the plant requesting that it develop a technology for restoration of the locomotive axles now on hand. We are always ready to meet the production people half way. But a reasonable question arises: will the same thing happen with the technology for repair of the locomotive axles as happened with the technology for the car axles? For the time being we cannot answer this question.

With respect to the equipment for the processing of the axles of the assembled wheel pairs, although it was fully within the capacity of the PKTB [planning and design technical bureau] of the main administration, we ourselves nevertheless found that for many years the Kramatorsk heavy machinery plant has been producing lathe and knurling machines which are perfectly suited for the technology we developed.

From our standpoint the experience acquired is sufficient for extensive introduction of the progressive technology. And here and there they are already beginning to understand its value. For example, this year, at the request of the executives of the Velikolukskiy locomotive repair plant, we will be able to organize there the restoration of the rail webs of the wheel pairs of the diesel trains. The same work has been begun in the electric station Izmaylovo and in a short time they will begin restoration of the landing places of the armature shafts of the traction motors in the electric station Sokol of the Moscow metro.

The restoration of critical and expensive parts must be organized with far more vigor than is now being displayed in the transport enterprises. Indeed, last year according to the PKTB data on the cars and the wear and tear on the rail webs, and the approach and preapproach parts, because of defects in the pressing more than 14,500 axles were irrevocably lost, axles which could have been restored, thereby saving nearly 6,000 tons of axle steel.

Gondola Car Repair

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 21 Apr 82 p 2

[Text] The Car Has Come Back--On the Transport Conveyer--Everyone who has anything to do with railroad shipments is familiar with this picture: the mining people are drastically short of gondola cars and this is upsetting the plan for deliveries. However, it is necessary to sort out the defective rolling stock supplied and to return to the railroad an enormous number of these very gondolas. I am not exaggerating: the statistics prove that more than one-third (up to 35 percent) of the cars coming in to the Mikhaylov GOK [mining and concentration combine] are unsuitable for the shipments of ore, concentrate and liquids. We will consider two circumstances. First: in 2 years 65-70,000 unsatisfactory cars have been gathered. So that we are not talking about trifles. And second: of the total volume of shipment of the Kursk branch of the Moscow Railroad approximately 80 percent is accounted for by the proportion of output of the Mikhaylov GOK. This makes it clear why the transport of metallurgical raw material is a constant source of worry not only to the mining people but also to the railroad personnel and the party organs.

How do the transport workers of the mining enterprises usually deal with this kind of situation? They are not too careful in picking out the defective gondolas: all the ones that can be patched up are left. This requires maintaining a fairly large contingent of repair workers who plug up the cracks and holes chiefly with paper bags they obtain heaven knows where. This is not inexpensive. But if you sort the cars strictly according to the rules then you will be smoothing and polishing and you will not get to ship any ore at all!

The inevitable accompaniment of this kind of situation is an endless flow of reciprocal claims from the mining and the railroad people and complaints made to all the conceivable offices and departments. From time to time threatening telegrams and categorical assignments have come in from the MPS [Ministry of Railways]. But to be honest about it, little good came of them.

Another way had to be found--a more effective solution of this problem which comes up every day. And such a way was found when the workers of our section of the railroad were officially derailed and acquired a profound awareness of the critical situation.

In general, the solution is well known: it is necessary to build a solid mechanized railroad car preparation point (PPV) and to achieve a sufficiently widespread distribution of the portable railroad car repair machines Donbass. However, it was well known that these machines are in very short supply. But then whoever looks will always find. And in our cases those who look have been actively supported by the party organization. The matter was considered so important that at open party meetings of railroad car, traffic and track workers it was discussed for the purpose of combining the efforts of the various subdivisions. As always, this appeal to the people helped: it was decided to lengthen the tracks and install additional equipment and to fulfill some construction work with their own manpower. Thus, at station Mikhaylovskiy Rudnik the machine Donbass was set up and put into operation.

As the saying goes, the first swallow does not make spring. This is also true in respect to our first machine but only in one sense: it made no significant impact on the restoration of the gondola cars. It also became clear that there is need for additional devices and improved machines. But the main thing was something else and it was indisputable: mechanization of repair made it possible to do what had hitherto been only a dream--to restore the cars according to the normal technology and to do it rapidly and on a high quality level.

One would not be correct in thinking that further steps were simpler. A whole series of problems evolved: new machines--this involved a broad work front, new additional tracks for the machines, a number of production spaces and the development of specific living conveniences for the people. The volume of work was sizable and it could scarcely be handled with their own manpower. But who said that there are no allies for the initiators? And there were such allies: under the intensive conditions of work the construction workers were able to find the manpower, the means and the time and they took on considerable volumes of the work in the general contract. It is noteworthy that their attitudes were not formed on naked economic considerations. The transport construction ministry workers were vitally interested in establishing a good repair base for their colleagues and hence from time to time they have to come up against repair of the rolling stock.

The Zheleznogorsk gorkom also spoke up, decisively supported the initiative taken, and pooled the efforts of the transport workers and the miners. The constant supervision and aid also helped to overcome the difficulties and to achieve the planned goals.

On the whole, they were able to establish a good technical base for the seven Donbass machines needed for the service and production assignments (the forging, mechanical, babbit and casting departments, etc.). Also emerging were well-equipped everyday living quarters and a dining room.

And the efficiency experts did some thorough work on the machines. On each one they installed telphers which enable them to change the car doors and the heads of the automatic couplers. They modernized the formerly cumbersome devices for straightening the covers of the hatches. They found a good variant for the arrangement of the searchlights so that the repair personnel could work at night as well as by day.

In short, it is possible today to talk about the results achieved. I will cite the figures. Whereas the repair in the Ninth Five-Year Plan comprised 80,000 gondola cars and in the 10th Five-Year Plan nearly 260,000, the year 1981 alone already encompasses 63,000 gondolas. That is, an average of 200 gondolas a day are being put back in operation. The collective of the mechanized point (and it also embraces station Kurbakinskaya) is applying persistent efforts to see to it that 220 cars daily are restored to operation), that is, that no less than 30 units are repaired by each machine. By way of comparison it can be said that on the average for the Moscow Railroad this indicator comprises 21-22 cars. It is no coincidence in this matter that a road school for advanced work was operated in Zheleznogorsk. The participants in this school were satisfied about the advantages and effectiveness of the Kursk variant--the use of the Donbass machine.

The innovation also engendered an improved organization of labor and wages and a different system of computing results. How was it actually before? At the close of the month someone approached the repair worker and declared in a half whisper: "Look in the cash box--you will see what is due you." And there was usually a 3-5-fold bonus there. There was no benefit to be derived from this kind of incentive system. Now the results are compiled for every shift. And everyone knows to what extent his brigade fulfilled the normative assignment and what sort of bonus is paid in the event of overfulfillment. Is it necessary to say that this improved labor discipline under one's very eyes and led to a reduction of labor turnover. The fact is the repair operation had become, I would say, the customary plant process and not the portion of the task assigned to random people.

A step has been taken and some follow-up ones are required. And the need to enlarge the stock of machines requires no explanations since the flow of ores is increasing. But the breakdowns of cars are varied in nature. And this includes those which you do not eliminate at a PPV. However, it should not be necessary to run a car hundreds of kilometers for specialized depot or plant repair. Would it not be possible to do something themselves in view of the constant drastic shortage of cars? It would seem that this is possible. At a relatively short distance from the Mikhaylov GOK is the city of L'vov with its railroad car depot. Here too they do work which is not within the capacity of the Donbass's. For the time being this work is still limited but nevertheless its help has already had its effect. The depot needs to be strengthened and modernized. And this work has virtually been begun. When it is completed, the L'vov depot will be able to carry out repair of thousands of gondolas every year.

As we see, we can ourselves do a good deal in respect to the railroad car problem. And this is good. However, we cannot also close our eyes to the facts of another procedure. I repeat: the years go by and the percentage of defective output in the cars delivered is not being reduced. This indicates that on a number of branches of the road (the Bryansk, Smolensk, Orlovka) and other roads whence come empty cars as per the regulations--on these the responsibility has declined. They send cars indiscriminately, even knowing they are unsuitable. And the wheels turn on hundreds of kilometers of track and the calculators--in their reports--tally figures indicating how it would be good to have fulfillment of the schedule for delivery of empty cars. And if the responsibility is not drastically stepped up, then no successes of the PPV collective and the L'vov depot will help. The defective output is throttling both them and the miners. And this danger is quite real: until the efforts of the MPS executives have made themselves felt in the matter of improving the delivery of gondola cars.

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RAILROAD

FEBRUARY-EARLY APRIL FOSSIL FUEL DELIVERIES DISCUSSED

Mid-February Report

Moscow GUDOK in Russian 17 Feb 82 p 1

[Text] GUDOK Fuel Dispatch--Coal--The following gratifying changes were made in the coal conveyer in the first half of February: the network plan for shipment of solid fuel is being fulfilled and many of the mainlines are stabilizing their work. It is gratifying that the main coal-loading railroads have established the necessary rates of operation. In the 2 weeks of February the Kemerovo Railroad exceeded the plan by 180,000 tons and the increased assignment by 48,000 tons. The Tselinna Railroad provided an increase of 109,000 tons and the Donetsk Railroad 44,000. The work is going well on the East Siberian, Krasnoyarsk, North Caucasus, Moscow, L'vov, Northern and Far Eastern railroads.

The success has been aided to a considerable extent by the increased supply of empty cars made available to the coal-loading roads. The Kemerovo Railroad, for example, obtained 180 cars a day over and above the regulation assignment and the Donetsk line 80 cars. The supplying of open cars on the approach tracks has been markedly speeded up and loading has been carried out more rapidly.

The chief goal now is not to reduce the rates of operation set up and to achieve still greater increases in the transport of coal: after all, the network arrears on the increased assignment amounts to more than 600,000 tons. But it is possible to eliminate this indebtedness by putting the unused reserves into operation. What are these reserves?

Let us examine these with the Donetsk Railroad as an example. This railroad still has an abundance of through shipments which transport a large quantity of coal. And not everything is going well with the unloading: everyday up to 250 cars are not made available. Through the fault of the mining people, the road is as many as 300 cars in arrears in its loading operation.

Among other causes retarding acceleration of the fuel conveyer are lack of rhythm in the delivery of open cars for loading, unsatisfactory preparation of the rolling stock, and a large number of uncleaned cars which have arrived as per the regulations.

It is now first of all necessary that a more efficient policy be pursued by the roads which are not fulfilling the plans for shipment of coal. Among these are the Alma-Ata, Krasnoyarsk and BAM lines.

Petroleum Products--How do things stand in respect to delivery of liquid products? In the first half of February there was an indebtedness of 690,000 tons of liquid fuel. Showing the greatest arrears were the Kuybyshev, West Siberian, South Ural, Moscow, Gor'kiy, Northern, Donetsk and Oktyabr railroads. The Belorussian and Privolzhsk lines have delivered their items in the recent period.

Operating at a steady pace are the East Siberian, Central Asian, Transcaucasus, Odessa and L'vov lines.

The main reason for the declines in the delivery of oil products is the extremely unsatisfactory organization of delivery of liquid fuel. This is primarily true of the Baltic, Far Eastern, Southwestern and Privolzhsk railroads.

Work is also proceeding poorly in the matter of advancing the movement of loaded and empty tank cars. Proceeding at a slow pace is the movement of rolling stock with the most important goods on the Kuybyshev, Oktyabr', Transcaucasus and Transbaykal railroads. In transit on these and other roads were from 500 to 2,000 tank cars with petroleum products.

There have been very intense difficulties in connection with the fulfillment of the regulation assignments. As a rule, these assignments are disrupted on the roads where delivery of liquid products is poorly organized. Thus, the Baltic Railroad was 4,000 empty tank cars in arrears and the Southwestern and Far Eastern roads 1,500 cars each. Fulfillment of the regulation assignments has also been disrupted on the Moldavian, Transcaucasus, Krasnoyarsk, Central Asian, West Kazakhstan and a number of other roads.

February Statistics

Moscow GUDOK in Russian 3 Mar 82 p 1

[Text] GUDOK Fuel Dispatch--Coal--In February the network as a whole shipped 450,000 tons of coal over and above the basic plan.

The railroad workers of the Kemerovo line, working in cooperation with the Kuzbas miners, maintained a high rate of shipments. During the month they shipped 300,000 tons of coal above the plan and 44,000 tons above the supplementary assignment. The railroad workers of the Tselinna line and the coal miners of the Ekibastuz basin worked well. As against the corresponding period last year they increased the average daily loading by nearly 300 cars.

On the East Siberian Railroad the shipment of fuel was efficiently organized. Its workers maintained a uniform rhythm of delivery of empty cars and the coal miners loaded them on schedule. As a result, the basic plan for loading was overfulfilled by 202,000 tons and the supplementary assignment by 30,000 tons.

Despite difficulties in advancing the flows of traffic and in the unloading, the Northern Railroad achieved good results. They made supplementary shipments of 102,000 tons of coal. Overfulfillment of the assignment was achieved by the Moscow, North Caucasus, Transcaucasus, Southeastern and Far Eastern railroads. The Donetsk Railroad succeeded in fulfilling the basic plan.

It should be noted that the Donetsk Railroad could also have fulfilled the basic assignment if it had made more efficient use of the resources available to it. It was provided with many open cars for the shipment of other freight. Cars were also owed to it by the regulation railroads--the L'vov, Southwestern, Odessa, Moldavian, Transcaucasus and Azerbaijan, which did not fulfill the assignments for delivery of empty open cars.

Petroleum Products--Fulfillment of the plan for the delivery of petroleum products was achieved by the Baltic, L'vov, Southwestern, Odessa, North Caucasus, West Kazakhstan, Central Asian, Krasnoyarsk and East Siberian railroads. They made supplementary shipments of about 7,000 tank cars. But these roads could not make up for the undershipment on three crucial petroleum transport roads--the Kuybyshev, West Siberian and South Ural. These roads made inadequate use of their tank car fleet and failed to obtain more than 14,000 empties as per the assignments. Primarily to blame for this were the Baltic, Southwestern, L'vov, Central Asian and Far Eastern railroads.

March is upon us--the final month of the first quarter. The plan is in a very crucial stage. It is essential beginning with the first days of the period to maintain a high rate of shipment of fuel. There must be no repetition of the errors made in February when the first 10 days were marked by an arrearage of half a million tons of coal and as many of petroleum products.

Early March Statistics

Moscow GUDOK in Russian 18 Mar 82 p 2

[Text] GUDOK Fuel Dispatch--Coal--Loading of this product showed a marked improvement over the preceding week. Most of the roads made essentially full delivery of the cars requisitioned by the coal people. For the network as a whole the daily average loading of solid fuel was increased by nearly 1,000 cars, which made it possible to fulfill the basic plan for loading.

Marked improvements were made in the situation on the Donetsk Railroad. We remind you that at the beginning of the month this road experienced a shortage of the cars coming in from the neighboring regulation roads. This situation has now improved. But unfortunately the coal mining people were not able to exploit the favorable potential. All at once there was a suspension of delivery of cars and a failure to submit adequate requisitions for them. This was the reason for the loading deficit of 453 cars on 10 March and 480 cars on 11 March. And after all, the potentialities of the Donbass are great. This is apparent from the work on the off days of 13 and 14 March when the assignment was overfulfilled by 1,100 cars.

On the Kemerovo Railroad delivery of railroad cars is somewhat improved but nevertheless the road is experiencing a shortage of loading resources. A great deal of these are owed to it by the South Ural, Sverdlovsk, Privolzhsk and Kuybyshev railroads. At the same time it should be noted that not everything is going smoothly with the miners of the Kuzbas. Thus, for example, because of the lack of requisitions and the suspension of delivery of empty cars, undershipment comprised 195 cars on 9 March, 230 cars on 10 March and 360 cars on 11 March.

Stepping up the rates of the shipments are the workers of the Tselinna Railroad and the coal miners of the Ekibastuz basin. As of 9 March they came up to the assigned level and on the last two off days they even exceeded it. But they are still owed a great deal--65,000 tons of fuel. The Tselinna is in need of substantial help from the regulation railroads--the Baltic, Belorussian, Privolzhsk, Kuybyshev, Sverdlovsk and South Ural.

Things are going well with the coal shipments on the Moscow, Southeastern, Pridneprovsk and East Siberian railroads. They are overfulfilling the established assignments.

Poor organization marks the work on the Alma-Ata, Krasnoyarsk and Northern railroads.

Petroleum Products--For the network as a whole the basic plan for the shipment of these products has been overfulfilled by 171,000 tons. The preparation for shipments is somewhat better than in February. The plan is being overfulfilled by the Moscow, Belorussian, L'vov, Odessa, Donetsk and North Caucasus railroads.

Shipment of oil products is being carried out in somewhat greater quantity than in February on the Kuybyshev, South Ural and West Siberian railroads but the quantities are still considerably less than those stipulated in the assignment. On the Sverdlovsk Railroad shipment has fallen off as compared to February. To some degree, with the exception of the West Siberian, these roads are themselves to blame for the nonfulfillment of the shipment plan because of the sharp increase in the turnover of tank cars. For example, on the Sverdlovsk Railroad this figure showed an increase of 0.8 days....

Early April Statistics

Moscow GUDOK in Russian 7 Apr 82 p 1

[Text] GUDOK Fuel Dispatch--Coal--In the first days of February the loading of coal proceeded at higher rates than a year ago. For the network as a whole this figure increased by 1,100 cars a day. The best results were those obtained by the Kemerovo people. In cooperation with the coal mining workers of the Kuznetsk coal basin they last week overfulfilled the basic plan by 73,000 tons and the supplementary assignment by 31,000. The railroad is making good use of the open cars: 700 of them were unloaded over and above the plan and turnover was accelerated by 2.5 hours as against the assignment.

The coal workers in turn have put in operation all of the empty cars delivered to them. Effective aid has also been given to the Kemerovo people by the regulation railroads. The West Siberian Railroad, for example, turned over from its unloading 2,800 open cars as against a norm of 1,650.

Fulfillment of the supplementary fuel shipment assignment was achieved by the Baykal-Amur, East Siberian and South Ural railroads. The Tselinna is still in arrears although it loaded 1,200 cars more than in the corresponding period last year.

Special mention should be made of the Donetsk Railroad. As we know, in March it achieved success with the plan and the supplementary assignment. The neighboring organizations have helped in effective fashion with empty cars.

But in the first days of the new month a decline ensued. It is true that the Donetsk, like the other roads, began April better than last year and loading increased an average of 1,100 cars a day. But this was still a small gain. The main reason for the decline was the lack of concern on the part of the neighboring organizations. The regulation roads were earnest in supplying the Donetsk. Some of them began to disrupt the traffic at the end of last month. Thus, for example, on the last day of March the Southwestern Railroad did not supply a single one of the 450 open cars stipulated to come from its unloading and it included for unloading the 244 transit empty cars going to the Donbas for coal. On this day the Moldovian Railroad fulfilled only half of the amount called for by the plan and the Southeastern and Azerbaijan railroads delivered 700 open cars less than the amount prescribed by the plan. On the following day, 1 April, the Odessa and North Caucasus railroads underdelivered 1,100 more empties. As a result, in two days of April the Donetsk failed to receive 2,100 open cars. Stemming from this was the disruption of the loading plan: the indebtedness already exceeds 65,000 tons. On the third day of the month the supplying of empties to the road was reinstated and there is reason to expect a high rate of shipment of fuel.

Now the chief task of all the coal-loading roads is to step up the rates of shipments of coal and to more rapidly liquidate the indebtedness.

Petroleum Products. For the network as a whole the plan for the shipment of these products was exceeded by 325,000 tons and the supplementary assignment by 192,000. Fulfillment of the plan is being successfully achieved by the Moscow, Belorussian, Southwestern, L'vov, Odessa, North Caucasus, Southeastern, Central Asian, Gor'kiy and South Ural railroads. A good beginning for the month of April has been made by the Kuybyshev Railroad. On the first day of the month it overfulfilled the plan by 500 tank cars and it shipped out 700 more of these than on 1 April of last year. Since the beginning of the month the road has delivered more than 2,500 tank cars of petroleum products above the plan.

The West Siberian and East Siberian railroads are still failing to keep up with the plan.

These days the shipments of liquid fuel are acquiring particular importance. The prolonged cold spells in some zones of the country have generated a need for heating mazut for the electric power stations. In addition, every day sees an increase in the scope of the agricultural work, for which fuel and lubricant materials are required.

We again call attention to the crucial responsibility of the regulation railroads for fulfillment of the assignments for the shipments of solid and liquid fuel. Unfortunately, some mainlines are still violating regulation discipline. This is primarily true of the Belorussian, Oktyabr', L'vov, Odessa, Sverdlovsk and Alma-Ata railroads, which are not fulfilling the norms for the delivery of open cars. Also the Baltic, Southwestern, Donetsk, Odessa and Central Asian railroads, which have been in arrears in respect to tank cars.

The increased volume of shipments of fuel requires a considerable improvement in the use of the fleet of both open cars and tank cars. It is essential to accelerate their advance and to provide for on-schedule unloading. It is necessary to more rapidly shift the surplus car inventory from the railroads of the center and the south to the chief coal and oil-loading and transport roads. The Far Eastern Railroad has a special responsibility in this matter. It is obliged to provide for the prompt return of the empty tank cars to be used for the transport of petroleum products from the enterprises located in eastern and western Siberia.

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